notice; Secondly, that these general results proceed from causes ; and, Thirdly, that these causes require assorted adjustments as the condition of their operation. Take these three general facts, and apply them to the subject before us, and tht>j> will at once explain the course which Inductive Science has run.

(1.) *Nature wfull of general facto or phenomena.* Many of these general facts or results are of a very obvious nature, and are intended to be noticed by all who take the trouble of exercising their minds and senses. Thus the alternation of day and night and of the seasons, and the periods of the moon, would he early discovered by all. We can conceive that one of the first efforts of true science would consist in giving precision to these observations; in determining, for instance, the true length of the year and the lunar month. The more striking phenomena of the heavens, such as eclipses, would then come to be observed, till by degrees, and as society advanced, certain persons would be induced to pursue science for its own sake, and independently altogether of the immediate practical good derived from it, or the fame accruing to those who were able to predict some of the more startling appearances of the heafbnly bodies. G cneral observations in regard to the sun and moon's apparent motion in the sidereal heavens would come to be multiplied, and handed down as a precious legacy to future generations. The fertility of mind and the indefatigable perseverance of Kepler conducted at last to the discovery of the laws which bear his name, and these, with the mechanical discoveries of Galileo, enabled Newton to rise to the discovery of the law of gravitation. Now, all along this lengthened line, we have merely the discovery of interesting and instructive general results, till Newton arrives at a cause, in a property inherent, as far as we can see, in all masses of matter. Though it should be discovered that this property is the result of other properties of matter, (as from the mutual repulsion of all particles of matter, combined with the somewhat greater mutual attraction of matter arid an all-pervading electric fluid,) still as gravitation is a property of all masses of matter, we are not the less to regard Newton as having ascended to the discovery of a cause.

(2.) It appears, then, that God has so constituted this world, that mankind can observe many interesting laws of great speculative and practical value, though they have no conception whatever of their causes. But still *these general phenomena*—being merely particular phenomena resembling each other in certain respects—do all proceed from causes* We now know, for example, that all those general laws of the movements of the heavenly bodies which were observed with such interest by the ancient astronomers, and which are still watched by the husbandman arid shepherd, proceed from the property of gravitation, as connected with the collocation of the bodies which attract each other. These laws in themselves were fitted to excite an intense interest in the human mind, and the observation of them served

most important practical purposes; and they were so obvious, at least some of them, that the mind could arrive at a knowledge of them without having so much as a glimpse of their cause. But still there was an anxiety all along to discover the cause of which they were the effects ; and the discovery of Newton is hailed as the greatest contribution ever made to astronomy. And lot it bo observed, that it was the discovery of these laws of phenomena that enabled Newton to find out the cause of the phenomena. This is easily explained. The cause is so adjusted as to produce these general phenomena, which become in consequence the most expressive indication of the nature of that cause.

While the learned author whose works we are reviewing has seen very clearly fche distinction between the laws of phenomena and the causes of phenomena, yet he has not observed, or at least ho has not pointed out, the connexion which subsists